



JAPANESE TAKEAWAY

Pocket computers are used for a variety of serious applications. Engineers use them on-site to calculate stress and loading factors. On the floor of the Stock Exchange they are used by speculators to calculate profits, and they provide salesmen with accurate estimates of cost. We compare several machines from Casio's range.

Programmable calculators can be used in many similar applications, but pocket computers have a definite advantage in that they use BASIC and can handle text, whereas programmable calculators use their own special languages (often resembling machine code) and are suitable for numeric work only. Pocket computers are ideal for tasks in which calculations involving a set formula are regularly needed. Such calculations are often repetitive and tedious; pocket computer users can write their own programs to handle these.

The cheapest of Casio's well-established range of pocket computers is the FX-720P, which costs £60. Its dimensions are 165 x 85 x 15 mm (6½ x 3¼ x ½ in) and it weighs only 210 grams (7½ oz). The FX-720P has a keyboard a little over half the size of a normal keyboard. It uses the conventional QWERTY layout, with the exception that the keys line up with those in the other rows, rather than being offset in the usual way.

Each alphabetic key can produce two other characters (such as punctuation marks) and BASIC keywords, when used with the Shift or Function keys. Unlike other keyboards, however, these keys are not used simultaneously with the alphabetic key; they are pressed and released before the appropriate key is pressed. This makes it easy to work the keyboard using one hand (leaving the other hand free to hold the computer).

The FX-720P uses a liquid crystal display (LCD) with 12 characters in a single line, and longer lines are displayed by using two cursor keys to scroll left or right. A small thumbwheel at the side of the display adjusts the LCD contrast to suit different viewing angles and levels of illumination. If the computer is not used for six minutes, it shuts the display off to save power.

The FX-720P is sold with a mere two Kbytes of memory. However, all user memory is supplied in the form of plug-in cartridges, which retain their contents when removed from the machine. A user can therefore store different programs and data on separate cartridges, which are plugged in when needed. Extra two Kbyte cartridges cost £25 each, and four Kbyte modules are sold at £36 each.

As the cartridges can hold so little data they

quickly fill up, especially as the computer allows up to 10 BASIC programs to be held in memory at once. A special mode must be selected to enter a BASIC program and another is needed to run it. The FX-720P's version of BASIC is surprisingly good for such a small machine: almost all the standard commands and functions are included, with the exception of CHR\$ and ASC. A simple command, BEEP, allows two different sounds to be produced.

The FX-720P is regarded as being at the bottom of the Casio pocket computer range, and so most of its functions are improved upon by other models. One feature, however, is unique to this machine. This is the 'Data Bank', which is a small database program. Information such as names and addresses, expenses or diary dates can easily be entered using this program. The program will search for any item, and even allows for different levels of search — for example, if a search has found a large number of items it can search within them on another criteria. This makes it a direct rival to the Psion Organiser (priced at £100), yet the FX-720P costs less and is more versatile.

CASIO FX-750P AND PB-700

While the FX-720P seems to be biased towards the businessman, the next model in Casio's range, the FX-750P, is geared towards the needs of scientists and engineers. At a cost of £100, it offers a 24-character display and a slightly improved keyboard. It comes with a two Kbyte memory

Budget Model

The FX-720P pocket computer from Casio has 2K of memory on plug-in cartridges, a one-line liquid crystal display, and a full set of alphabetical and numeric keys. Additional cartridges can be plugged in to provide extra memory. The price of the FX-720P is £60



CHRIS STEVENS